Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

.



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

U. S. DEPARTMENT of AGRICULTURE \star SOIL CONSERVATION SERVICE

Collaborating with COLORADO STATE UNIVERSITY EXPERIMENT STATION STATE ENGINEER of COLORADO and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations. FEB. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Neva da	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR SOIL CONSERVATION SERVICE WASHINGTON, D.C.

Released by

M. D. BURDICK

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE DENVER, COLORADO

KENNETH L. WILLIAMS

.

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE ALBUQUERQUE, NEW MEXICO

DONALD F. HERVEY

C S U EXPERIMENT STATION In Cooperation with S. E. REYNOLDS

STATE ENGINEER STATE OF NEW MEXICO C. J. KUIPER

STATE ENGINEER STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor and

RONALD E. MORELAND, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply canditions in Fort Collins, Big Thompson, Longmant, Boulder Valley, Jefferson, Teller–Park, Douglas Caunty, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Sautheast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer Caunty Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Puebla, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Bransan Trinchera, Western Baca, Sautheastern Baca, Two Buttes, Bent, Timpas, Nartheast Prowers, Prowers, Kiowa Caunty, West Otera, East Otera, and Big Sandy Sail Canservatian Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Ria Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservatian Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes wa ter supply conditions in Upper Chama, East Rio Arriba, Taas, Lindrith, Jemez, Santa Fe – Pajoaque, Sandoval, Tijeras, Cuba, and Edgewaad Sail Canservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolares, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Canservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnisan, Cimarron, Shavano, and Uncompany Sail Canservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Maffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservatian Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

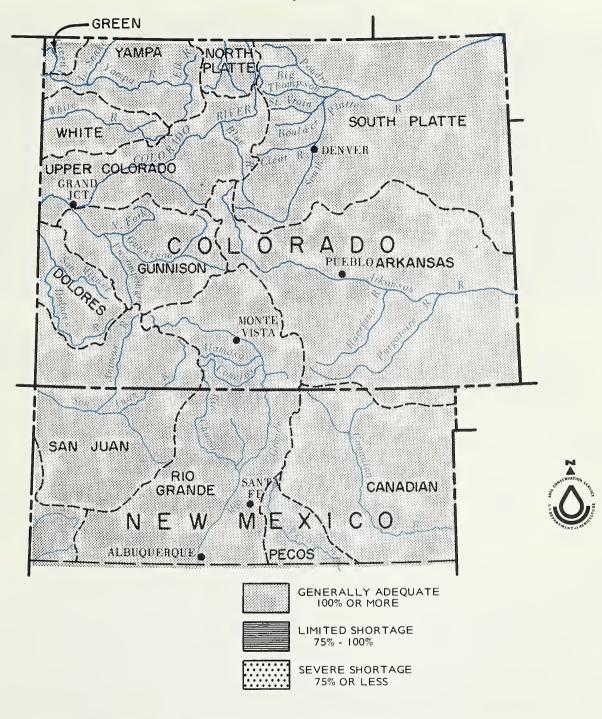
Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Canservation Districts.

- APPENDIX I SNOW SURVEY MEASUREMENTS
- APPENDIX II SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

February 1, 1972



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of February 1, 1972

ONLY ABOUT HALF OF THE SNOW SEASON HAS PASSED AS OF FEBRUARY FIRST. MOST OF THE TWO STATE AREA HAS NEAR TO SLIGHTLY ABOVE NORMAL SNOW PACK. HIGHEST AREAS OF SNOW ARE IN NORTHERN NEW MEXICO AND SOUTHERN COLORADO, PARTICULARLY THE RIO GRANDE AND SAN JUAN BASINS. EXTREMELY HIGH WINDS IN NORTHERN COLORADO HAVE BLOWN SOME SLOPES COMPLETELY CLEAN WHILE DEPOSITING LARGE AMOUNTS IN OTHER AREAS. THE EFFECTS OF THIS WIND WILL BE EXAMINED. CARRY-OVER RESERVOIR STORAGE IS GOOD IN NORTHERN COLORADO. POOR STORAGE EXISTS ON THE ARKANSAS IN COLORADO AND RIO GRANDE IN NEW MEXICO.

> -- THE SNOW PACK RANGES FROM 128% OF THE 15 YEAR AVERAGE ON COLORADO THE SAN JUAN TO 111% ON THE SOUTH PLATTE BASIN. 150 MPH WINDS HAVE BEEN RECORDED IN THIS AREA. THE EFFECT OF THESE

WINDS WILL BE EVALUATED PRIOR TO FORECAST. CARRY-OVER STORAGE ON THE SOUTH PLATTE IS EXCELLENT. THE BIG THOMPSON PROJECT HAS 129% OF AVERAGE STORAGE AND WILL PROVIDE AN EXCELLENT SUPPLEMENTAL WATER SUPPLY THIS SUMMER. ALL OTHER BASINS HAVE LESS THAN NORMAL STORAGE. MOUNTAIN SOILS CONTAIN NEAR NORMAL AMOUNTS OF MOISTURE. VALLEY SOILS ARE REPORTED TO BE IN FAIR TO GOOD CONDITION.

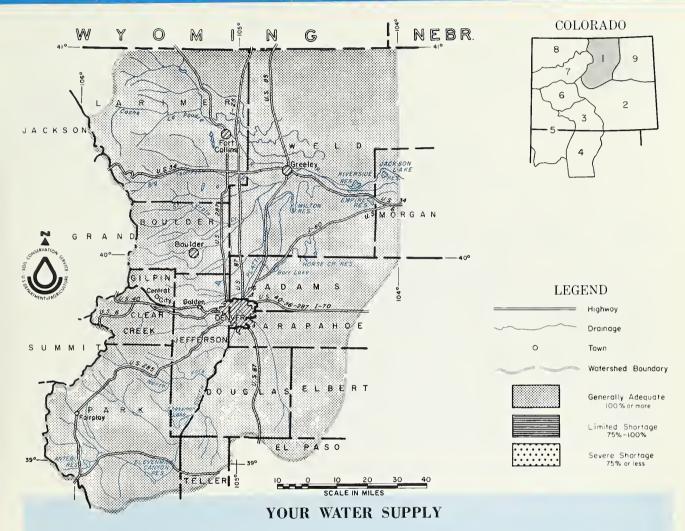
-- ALL OF NORTHERN NEW MEXICO HAS A GOOD SNOW PACK, NEW MEXICO ALTHOUGH JANUARY WAS A DRY MONTH. EARLY SNOW FALL WAS MUCH ABOVE NORMAL. SNOW ON THE RIO GRANDE IS ABOUT 111% OF NORMAL, ON THE CHAMA ABOUT 102% AND ON THE SAN JUAN 124%. THE PECOS HAS CONSIDERABLY BETTER SNOW THAN LAST YEAR, BUT ONLY ABOUT 102% OF AVERAGE. ELEPHANT BUTTE RESERVOIR CONTAINS 225,000 A.F. WHICH IS ABOUT 60% OF NORMAL. CONCHAS RESERVOIR CONTAINS 79,000 A.F. OR ABOUT 50% OF NORMAL. MOUNTAIN SOILS CONTAIN ABOUT AVERAGE MOISTURE.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK OVER THE SOUTH PLATTE IS SPOTTY. SOME AREAS ARE REPORTING VERY GOOD SNOW WHILE OTHERS ARE DEFICIENT. HIGH WINDS MAY HAVE CAUSED DRASTIC CHANGES IN THE SNOW PACK. GENERALLY THE SNOW PACK IS GOOD. CARRY-OVER STORAGE IS 137% OF NORMAL. SOIL MOISTURE IS NEAR NORMAL IN THE MOUNTAIN AREA AND GENERALLY GOOD IN THE PLAINS AREAS.



The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	FORE-	% of	+		Flow F	Period
FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Season
No numerical				Bear Creek Coal Creek Deer Creek	Avg. Avg. Avg.	Avg. Avg. Avg.
forecasts issued				North Fork of So. Platte North Fork of Cache	Avg.	Avg.
until March 1, 1972				La Poudre Ralston Creek Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

(COMPARISON WITH PREVIOUS TEARS)								
RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF						
SUB-WATERSHED	Averaged	Last Year	Average +					
Big Thompson	4	86	122					
Boulder	3	106	109					
Cache La Poudre	8	73	125					
Clear Creek	6	85	86					
Saint Vrain	2	171	168					
South Platte	3	131	111					
DECEDVOID CTODACE (The	DECEDVOID CTODACE (Thousand As Et)							

SOIL MOISTURE

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:				
	Stations	Last Year	Average 🕇			
Big Thompson	3	97	110			
Boulder	1	73	95			
Cache La Poudre	2	92	91			
Clear Creek	2	69	79			
Saint Vrain	2	89	117			
South Platte	2	98	67			
RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH						

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

REDERVOIR STORAGE (nouounu		ENDOFI		RECERTOR OTORAGE (END OF T	
	Usable	U	sable Stora	ge	DECEDVOD	Usable	Usable Storage		ge
RESERVOIR	Capacity	This Year	Last Year	Average †	RESERVOIR	Capacity	This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6	Halligan	6.4	5.0	0.3	3.1
Barr Lake	32.2	21.0	25.9	17.6	Horsetooth	143.5	90.6	99.1	81.2
Black Hollow	8.0	4.2	4.3	3.3	Lake Loveland	14.3	11.4	10.0	7.9
Boyd Lake	44.0	35.9	44.0	27.6	Lone Tree	9.2	8.2	8.0	6.0
Cache La Poudre	9.5	7.8	7.8	6.6	Mariano	5.4	5.3	5.1	3.7
Carter Lake	108.9	88.2	93.6	61.9	Marshall	10.3	5.4	5.6	2.1
Chambers Lake	8.8	1.3	3.9	2.3	Marston	18.0	15.6	16.6	14.1
Cheesman	79.0	79.1	74.2	45.6	Milton	24.4	16.0	14.0	9.0
Cobb Lake	34.3	20.4	22.1	9.9	Standley	18.5	30.1	30.4	7.9
Eleven Mile	97.8	76.2	96.4	72.0	Terry Lake	42.0	5.7	6.3	4.6
Fossil Creek	11.6	8.8	9.1	5.4	Union	12.7	12.1	12.7	7.8
Gross	43.1	28.2	'35.0'	24.9	Windsor	18.6	18.6	4,1953	-1967 Perify.

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300 POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE



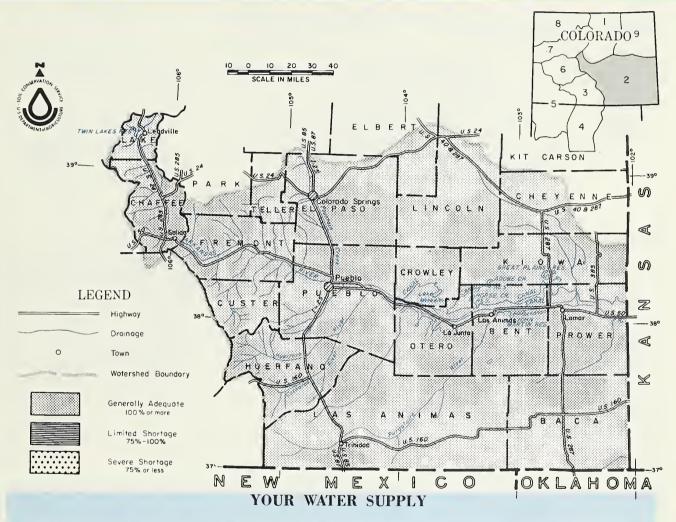
FIRST CLASS M

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



MOUNTAIN SNOW PACK ON THE ARKANSAS IS NEAR NORMAL AND SLIGHTLY BETTER THAN LAST YEAR. THE SOUTHERN TRIBUTARIES HAVE A MUCH BETTER SNOW PACK THAN LAST YEAR. CONSIDERABLY MORE SNOW IS NEEDED TO ASSURE ADEQUATE WINTER SUPPLIES. CARRY-OVER STORAGE IS ONLY ABOUT ONE HALF OF NORMAL. STORAGE IN TURQUOISE IS 58,500 A.F. SOIL MOISTURE IN MOUNTAINS IS BELOW NORMAL.

This report prepared by JACK N WASHICHEK and RONALD E. MDRELAND SNDW SURVEY UNIT, SOIL CONSERVATION SERVICE DENVER, CDLORADD

Issued by M. D. BURDICK---STATE CONSERVATIONIST U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE OENVER, COLDRADO LA JUNTA, CDLORADO

The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor. Fair, Average, Ex-cellent" With Respect to Usual Supply.

	FORE-	% of	+		Flow F	Period
FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Season
No numerical forecasts issued until March 1, 1972				Apishapa Fountain Creek Grape Creek Hardscrabble Creek Huerfano Monument Creek	Avg. Avg. Avg. Avg. Avg. Avg.	Fair Fair Fair Fair Fair Fair

(1) Observed flow plus change in Clear Creck, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches. SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

(COMPARISON WITH PREVIOUS YEARS)

SO	L	MO	ISI	URE

RIVER BASIN	Number of	THIS YEAR'S SNOW		
and/or SUB-WATERSHED	Courses Averaged	Last Year	Average +	
Arkansas Cucharas and Purgatorie	9 1	111 163	115 121	

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average 🕇	
Arkansas Cucharas and Purgatorie	3 1	90 76	82 99	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand	Ac. Ft.)	END OF	MONTH	RESERVOIR STO	RAGE (Thousand	Ac. Ft.)	END OF M	IONTH
RESERVOIR	Usable	U	sable Stora	ge	RESERVOIR	Usable	L	sable Stora	ge
RESERVOIR	Capacity	This Year	Last Year	Average	RESERVOIR	Capacity	This Year	Last Year	Average +
Adobe Creek Clear Creek Cucharas Great Plains Horse Creek	61.6 11.4 40.0 150.0 26.9	5.4 35.8	33.1 3.7 110.4 3.4	11.5 6.6 6.9 26.9 4.6	John Marti Meredith Model Turquoise Twin Lakes	41.9 15.0 130.0	3.2 0.9	14.6 26.0 1.8 46.4 42.2	81.5 5.7 2.6 6.9 19.7

+ 1953-1967 period.

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE

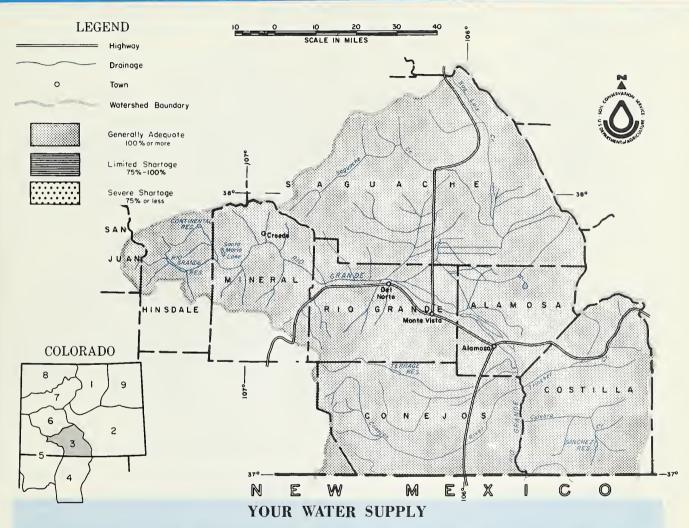




WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SNOWFALL WAS BELOW NORMAL DURING JANUARY BUT THE SNOW PACK STILL REMAINS ABOVE AVERAGE ON ALL DRAINAGES IN THE RIO GRANDE EXCEPT THE CONEJOS, WHICH IS SLIGHTLY BELOW AVERAGE. THE MAIN STEM OF THE RIO GRANDE HAS 132% OF AVERAGE SNOW. THE RESERVOIR STORAGE IS MUCH BELOW LAST YEAR BUT SLIGHTLY ABOVE THE AVERAGE. SOIL MOISTURE IN THE MOUNTAIN AREAS IS BELOW AVERAGE.

This report prepared by JACK N. WASHICHEK and RDNALD E. MORELAND SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE ORVER. COLORADD M. D. BURDICK ---STATE CONSERVATIONIST W. D. BURDICK ---STATE CONSERVATIONIST U. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE DENVER, COLDRADO DURANGO, COLDRADD

The Conservation of Water begins with the Snow Survey

FORECAST POINTFORE-
CAST% of
Average+
AverageNo numerical
forecasts issued
until March 1, 1972Image: Cast is a state of the state of the

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY OF SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS T	(COMPARISON WITH PREVIOUS TEARS)								
RIVER BASIN	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF							
SUB-WATERSHED	Averaged	Last Year	Average 🕇						
Alamosa Conejos Culebra Rio Grande	2 4 2 10	127 123 171 171	127 97 133 132						

SOIL MOISTURE

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average +	
Alamosa Conejos Culebra Rio Grande	1 1 2 2	62 102 81 71	79 91 95 92	

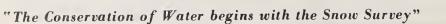
RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Capacity This Year Last Year Average T Capacity This Year Last Year Average T Continental 26.7 6.1 7.9 3.8 Sanchez 103.2 9.5 16.9 10.6 Platoro 60.0 2.9 2.9 7.1 Santa Maria 45.0 6.8 9.8 5.3	RESERVOIR	Usable	U	sable Stora	ge	RESERVOIR	Usable	Usable Usable Storage		ige
Platoro 60.0 2.9 2.9 7.1 Santa Maria 45.0 6.8 9.8 5.3	RESERVOIR	Capacity This Last , T	RESERVOIR		This Year	Last Year	Average +			
+ 1953-1967 perior	Platoro	60.0	2.9	2.9	7.1	Santa Maria	45.0	6.8	9.8 0.0	10.6 5.3 3.5

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300











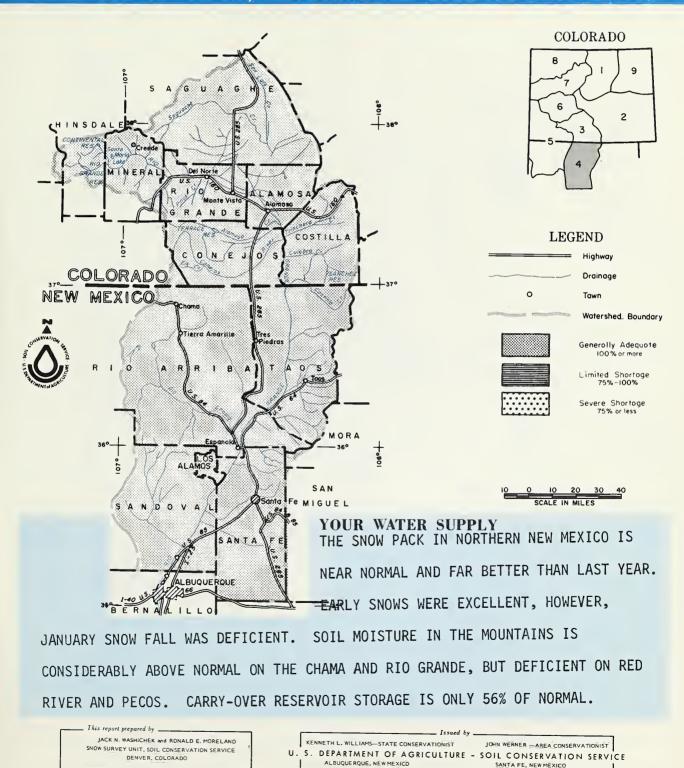
WATEN SUITET OUTLOON	cellent" With Res	pect to Usual Supply.
	Flo	ow Period
STREAM or AREA	Spring Season	Late Season
Saguache Creek Sangre de Cristo	Avg.	Fair
Creek	Avg.	Fair
Trinchera Creek	Avg.	Fair

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-cellent" With Respect to Usual Supply.

THIS YEAR'S MOISTURE as PERCENT OF:

Average +

91

176

119

82

Last Year

108

287 98

113

Number of Stations

224

h

No numerical Embudo Avg. Fa Jemez River Avg. Fa	Flow Period
Jemez River Avg. Fa	
until March 1, 1972 Nambe Creek Avg. Fa Rio Ojo Caliante Avg. Fa Rio Pueblo de Taos Avg. Fa	Fair Fair Fair Fair Fair

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH DREVIOUS YEARS)

Rio Grande, N.M. 11 296 111 Rio	RIVER BASIN
	s Chama Grande River

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Usable		Usable Storage			RESERVOIR	Usable		Usable Storage	
RESER VOIR Capacity	This Year	Last Year	Average	RESERVOIR	Capacity	This Year	Last Year	Average +	
Alamorgordo Caballo Conchas	111 344 273	46 17 79	50 30 154	73 47 163	Elephant Butte Elvado McMillan-Avalon	2195 195 38	225 1 13	369 1 22 + 1953	374 4 19

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

1

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE

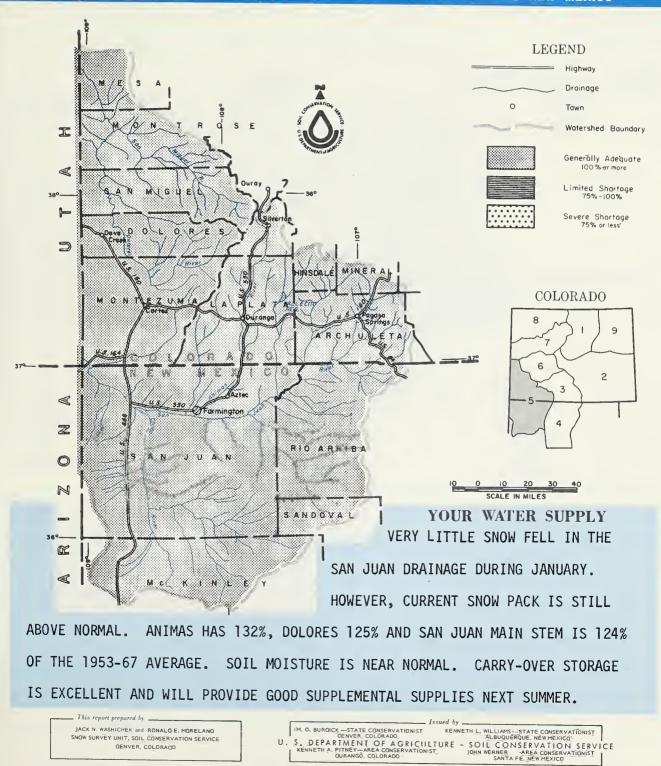


FIRST CLASS

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



The Conservation of Water begins with the Snow Survey

STREAM or AREA

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-cellent" With Respect to Usual Supply. Flow Period

Late Season

Spring Season

FORECAST POINT	FORE- CAST	% of Average	+ Average
No numerical			
forecasts issued			
until March 1, 1972	-		
(1)Observed flow plus change in storage in Val	licito Rese	ervoir.	

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of		AR'S SNOW
and/or	Courses		PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average +
Animas	8	135	132
Dolores	5	110	125
San Juan	5	138	124

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

DECERTION	Usable	U	sable Stora	ge	Usable		Usable Storage			
RESERVOIR	RESERVOIR Capacity This Last				Capacity	This Year	Last Year	Average		
Groundhog Lemon Navajo Vallecito	22 40 1696 126	9 19 929 50	14 26 938 73	7 14 542 46						

+ 1953-1967 period.



POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE FIRST CLASS N

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

F Μ

Florida	Exc.	Exc.	
Mancos	Exc.	Exc.	
San Miguel	Exc	Exc.	

SOIL MOISTURE

S

RIVER BASIN	Number of		S MOISTURE CENT OF:
	Stations	Last Year	Average 🕇
Animas Dolores San Juan	3 3 2	90 98 100	97 92 87

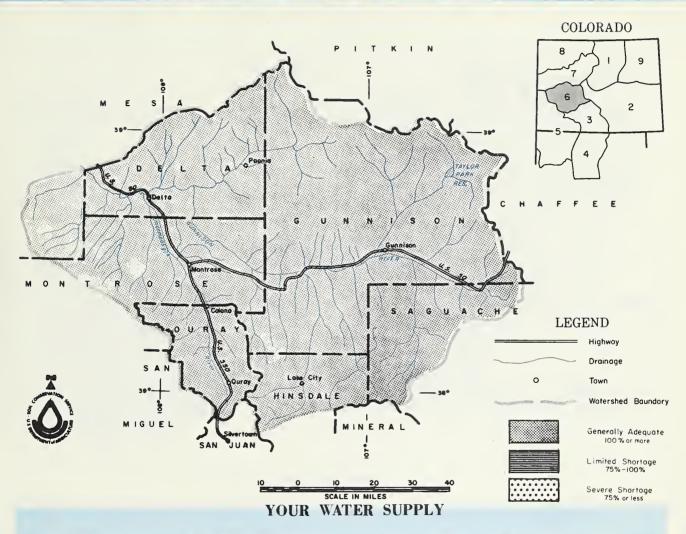
RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK IN THE GUNNISON DRAINAGE IS ABOVE NORMAL FOR FEBRUARY FIRST. SNOW ON THE GUNNISON MAIN STEM IS 122% OF NORMAL. WHILE THE TRIBUTARIES, SURFACE CREEK AND THE UNCOMPANGRE RIVER HAVE ABOUT 125% OF NORMAL. SOIL MOISTURE IS SLIGHTLY ABOVE AVERAGE. CARRY-OVER STORAGE IS LESS THAN LAST YEAR, BUT IS STILL NEAR AVERAGE.

This report prepared by	Issued by
JACK N. WASHICHEK and RONALO E. MORELAND	M. O. BURDICKSTATE CONSERVATIONIST R. L. PORTERAREA CONSERVATIONIST
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE	U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO	ORNVER, COLORADO CLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-cellent" With Respect to Usual Supply.

	DRE-	% of	+		Flow P	eriod
	AST	Average	Average	STREAM or AREA	Spring Season	Late Season
No numerical forecasts issued until March 1, 1972 (1)Observed flow plus change in storage in Taylor, SUMMARY of SNOW MEASUREMENTS	Blue	Mesa and	Morrow Poir	North Fork of Gunnison Taylor	Exc. Exc.	Exc. Exc.

SUMMARY of SNOW MEASUREMENTS

SUIL	MU	121	UKE

(COMPARISON WITH PREVIOUS YE	EARS)										
RIVER BASIN	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF				NATED AS DEDCENT OF		RIVER BASIN	Number of	THIS YEAR'S as PERCI	
SUB-WATERSHED	Averaged	Last Year	Average +		Stations	Last Year	Average +				
Gunnison Surface Creek Uncompahgre	12 3 3	109 100 100	122 128 121	Gunnison Surface Creek Uncompahgre	1 1 1	91 89 89	111 106 106				
RESERVOIR STORAGE (Tho	usand AC.	IL ENDO	RESERVOIR STORAGE (Thousa	ING AC.	IL. END OF	- MONTH					

	Usable	Usable Storage			DECEDIVOLD	Usable	U	sable Stora	age
RESERVOIR	Capacity	This Year	Last Year	Average +	RESERVOIR	Capacity	This Year	Last Year	Average +
Blue Mesa Morrow Point Taylor	941 121 106	370 116 67	543 116 104	 54					

+ 1953-1967 period.

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$ 300





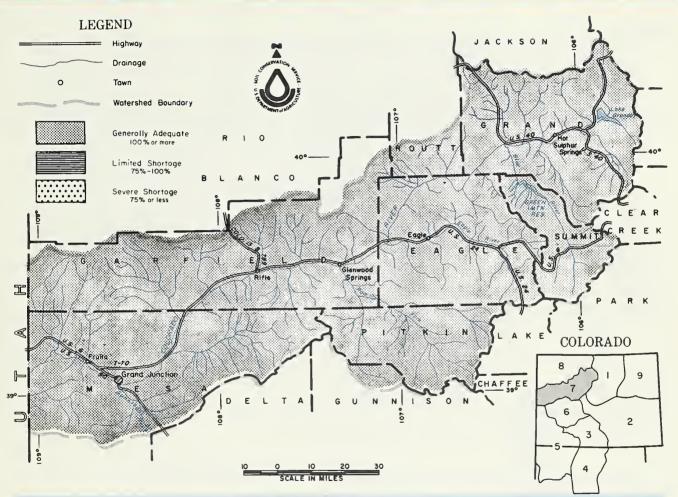


WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK IN THE COLORADO BASIN IS ABOVE NORMAL, BUT GENERALLY BELOW LAST YEAR AT THIS TIME. THE NORTHERN TRIBUTARIES, THE WILLOW AND WILLIAMS FORK RIVERS HAVE CONSIDERABLY ABOVE NORMAL SNOW. CARRY-OVER STORAGE IS SLIGHTLY LESS THAN LAST YEAR, BUT CONSIDERABLY ABOVE NORMAL. SOIL MOISTURE IN THE MOUNTAIN AREAS IS LESS THAN NORMAL.

 This report prepared by
 Issued by
 R.L. PDRTER

 JACK N. WASHICHEK and RONALD E. MORELAND
 STATE CONSERVATIONIST
 AREA CONSERVATIONIST

 SNOW SURVEY UNIT, SDIL CONSERVATION SERVICE
 OENVER, COLORADO
 OENVER, COLORADO

 DENVER, COLORADO
 GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-cellent" With Respect to Usual Supply.

	FORE- % of +		Flow Period		
FORECAST POINT	CAST Average Average	STREAM or AREA	Spring Season	Late Season	
No numerical forecasts issued		Brush Creek Eagle River Gypsum Creek	Exc. Exc. Exc.	Fair Fair Fair	
until March 1, 1972					

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Molfat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

THIS YEAR'S SNOW WATER AS PERCENT OF

Average +

113

118

116

126

136

133

Last Year

91

82

96

82

92

108

SUMMARY	of SNOW MEASUREMENTS
(COMPARISON	WITH PREVIOUS YEARS)

Number of Courses Averaged

8

18

10

3

3

2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RIVER BASIN

and/or SUB-WATERSHED

Blue River

Roaring Fork

Williams Fork

Colorado Plateau

Willow

SOIL MOISTURE

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average +	
Blue River Colorado Roaring Fork Willow	1 5 1 1	79 85 83 103	96 92 112 124	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable	Usable Storage			DECEDIVOID	Usable	Usable Storage		
RESERVOIR	Capacity	This Year	Last Year	Average +	verage t RESERVOIR		This Year	Last Year	Average †
Dillon Granby Green Mountain Homestake	254 466 147 43	236 365 89 13	246 380 91 24	236 254 73 	Ruedi Williams Fork Willow Creek Vega	101 97 9 32	74 59 7 14	79 54 7 17	 33 11

+ 1953-1967 period.

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE

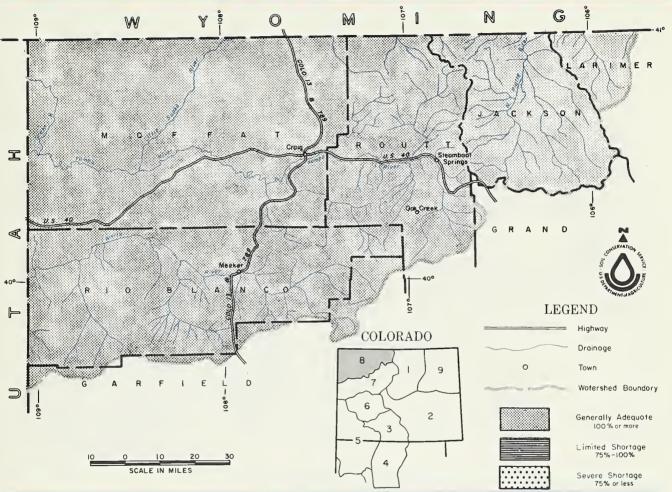
FIRST CLASS N

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217 OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

February 1, 1972 U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

ALTHOUGH THE SNOW PACK IN NORTHWESTERN COLORADO IS LESS THAN LAST YEAR IT IS STILL BETTER THAN NORMAL. THE NORTH PLATTE HAS THE BEST SNOW PACK WITH 138% OF NORMAL. SOIL MOISTURE IN THE MOUNTAIN AREAS IS NEAR NORMAL. THE AREA HAS BEEN SUBJECTED TO CONSIDERABLE WIND DURING JANUARY. CONSIDERABLE SNOW WAS MOVED AROUND.

 This report prepared by
 Issued by

 JACK N. WASHICHEK and RONALD E. MORELAND
 M. O. BURDICK-STATE CONSERVATIONIST

 SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
 QENVER, COLORADO

 GENVER, COLORADO
 GENVER, COLORADO

The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-cellent" With Respect to Usual Supply. Flow Period

> Late Season

Avg.

Avg.

Avg. Avg.

Avg.

Avg.

STREAMTEON TOREOASTS (1000 P	10. 11.)			WAILIN OUTET OUTEOUN CO	ellent With Res
FORECAST POINT	FORE - CAST	% of Average	+ Average	STREAM or AREA	Flo Spring Season
No numerical forecasts issued until March 1, 1972				Canadian River Hunt Creek Illinois River Michigan River Oak Creek Trout Creek	Avg. Avg. Avg. Avg. Avg. Avg.
SUMMARY of SNOW MEASUREMEN	ITS			SOIL MOISTURF	

SOIL MOISTURE

OW FOF	RIVER BASIN	Number	THIS YEAR'S MOISTURE as PERCENT OF:			
ge 🕇		Stations	Last Year	Average 🕇		
	Laramie North Platte Yampa	2 2 1	92 106 89	91 115 96		

+ 1953-1967 period.



FIRST CLASS N

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE

(COMPARISON WITH PREVIOUS YEARS) Number of THIS YEAR'S SNOT Г BUIER BACINI

RIVER BASIN and/or	Number of Courses	WATER AS PERCENT OF			
SUB-WATERSHED	Averaged	Last Year	Average +		
Elk Laramie North Platte White Yampa	2 2 5 2 3	101 73 84 84 83	102 115 138 112 117		

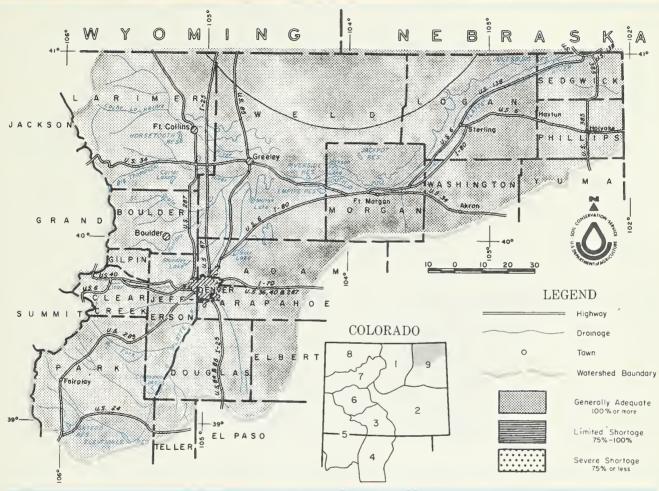
Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217 OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

GENERALLY THE SNOW PACK OVER THE SOUTH PLATTE IS NEAR NORMAL. SOME FEW SELECTED SNOW COURSES ARE FAR ABOVE NORMAL OR MUCH BELOW. HIGH WINDS DURING JANUARY MAY BE RESPONSIBLE FOR THESE ODD READINGS. CARRY-OVER STORAGE IS 122% OF NORMAL, BUT SLIGHTLY POORER THAN LAST YEAR. 'MOUNTAIN SOIL MOISTURE IS NEAR NORMAL. VALLEY SOILS ARE IN GOOD CONDITION.



The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-cellent" With Respect to Usual Supply.

FORECAST POINT FORE- % of Average			Flow Period			
		Average	STREAM or AREA	Spring Season	Late Season	
No numerical forecasts issued until March 1, 1972				South Platte from Greeley to Ft. Morgan South Platte from Ft. Morgan to Sterling South Platte below Sterling	Avg. Avg. Avg.	Avg. Avg. Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS MPARISON WITH PREVIOUS YEARS

	(COMPARISON WITH PREVIOUS TEARS)									
	RIVER BASIN	Number of	THIS YEAR'S SNOW							
	and/or	Courses	WATER AS PERCENT OF							
ļ	SUB-WATERSHED	Averaged	Last Year	Average 🕇						
	Big Thompson	4	86	122						
	Boulder	3	106	109						
	Cache La Poudre	8	73	125						
	Clear Creek	6	85	86						
	Saint Vrain	2	171	168						
	South Platte	3	131	111						

SOIL MOISTURE

RIVER BASIN	Number of Stations	as PERC	S MOISTURE
	Stations	Last Year	Average †
Big Thompson Boulder Cache La Poudre Clear Creek Saint Vrain South Platte	3 1 2 2 2 2	97 73 92 69 89 98	110 95 91 79 117 67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

BESERVOIR	RESERVOIR		sable Stora	ge	RESERVOIR	Usable	Usable Storage		
RESERVOIR	Capacity	This Year	Last Year	Average +	RESERVOIR	Capacity	This Year	Last Year	Average t
Carter Cheesman Eleven Mile Empire Horsetooth	108.9 79.0 97.8 37.7 143.5	79.1 76.2 19.4	93.6 74.2 96.4 26.6 99.1	61.9 45.6 72.0 22.3 81.2	Jackson Julesburg Point of Rocks Prewitt Riverside	35.4 28.2 70.0 32.8 57.5	19.8 70.0 22.0	29.7 19.8 67.0 21.4 47.0	27.4 20.0 43.2 11.4 38.7

Return if not delivered UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS "NALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE



FIRST CLASS

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1972

CURRENT INFORMATION PAST RECORD						
SNOW COURSE	OATE OF SURVEY	SNOW OEPTH (INCHES)	WATER CONTENT (INCHES)		HES)	
	SURVEY	(INCHES)	(INCHES)	LAST YEAR	AVG. 53 67	
NORTH PLATTE BASIN						
Laramie River Deadman Hill	2/1	38	10.2	14.5	8.7	
McIntyre Roach	NS 1/26	43	11.1		 9.8	
North Platte River	1/20	70		14.0	5.0	
Cameron Pass Columbine Lodge	1/31 1/31	56 62	21.2	27.6	12.9 13.6	
Northgate	1/31	13	2.6	4.9	3.6	
Park View Willow Cr. Pass(B)	1/28 1/28	28 33	6.8 9.4	7.8	5.2 7.1	
SOUTH PLATTE BASIN	17 20					
Boulder Creek Baltimore	1 /20	10	2.7		F 0	
Boulder Falls	1/28 1/29	18 35	3.7 9.0	4.4	5.2	
University Camp	1/29	45	12.1	11.6	10.9	
<u>Big Thompson</u> <u>River</u> Deer Ridge	1/31	12	2.4	4.1	2.6	
Hidden Valley Lake Irene (B)	NS 1/26	49	13.5	8.2	5.9	
Long's Peak	1/28	33	7.7	7.6	5.6	
Two Mile Cache La Poudre	1/30	45	12.0	11.8	7.9	
Bennett Creek	1/28	23	5.2	6.5		
Big South Cameron Pass	1/31 1/31	2 56	0.3 21.2	0.6	1.6 12.9	
Chambers Lake	1/31	21	4.6	8.4	5.2	
Deadman Hill Hour Glass Lake	2/1 1/28	38 20	10.2 4.3	14.5	8.7 3.1	
Joe Wright	1/31	50 32	15.5	18.5		
Lost Lake Pine Creek	1/31 1/27	6	9.1 0.5	10.2 1.5	7.2 1.2	
Red Feather	1/27	21	4.5	6.3	3.8	
<u>Clear</u> Creek Baltimore (B)	1/28	18	3.6	4.4	5.2	
Berthoud Falls Empire	1/28	36 17	7.8 3.8	10.4	8.0	
Grizzly Peak (B)	1/31	42	10.5	14.2	9.8	
Loveland Lift Loveland Pass	2/1 2/1	26 36	6.1 8.9	6.5 9.0	12.9	
Saint Vrain River Copeland Lake	1/29	18	4.7	2.0	2.0	
Ward	1/28	18	4.2	2.0 3.9	2.6 3.4	
Wild Basin	NS				6.9	
South Platte River	1/27	25	5.4	3.1		
Geneva Park Horseshoe Mt.	1/31	16 38	3.0 8.9	1.1	2.7	
Hoosier Pass	1/28	38	9.3	7.1	7.6	
Jefferson Creek Mosquito	1/27	27 35	5.4	5.3	5.7	
Trout Creek Pass	1/26	22	5.0	1.6		
ARKANSAS BASIN						
Arkansas River Bigelow Divide	1/28	12	1.8	6.5		
Cooper Hill (B) East Fork	1/28	34 28	7.3 6.5	7.7		
Four Mile Park	1/31	23	4.2	3.2	5.6 3.5	
Fremont Pass Garfield	1/28	42 35	10.4	10.8	9.5	
Hermit Lake	1/31	24	6.4	5.8		
Monarch Pass	1.31	39 43	10.9	9.7 5.8	10.3	
Twin Lakes Tunnel	1/31	26	5.5	5.0	6.0	
Westcliffe	1/31	23	5.9	4.3		

	CUF	RENT INFOR	RMATION	PAST R	ECORO
SNOW COURSE	OATE OF SURVEY	SNOW OEPTH (INCHES)	WATER CONTENT (INCHES)	WATER C	AVG
				YEAR	53 67
<u>Cucharas River</u> Blue Lakes Cucharas Pass LaVeta Pass (B)	1/28 1/28 1/28	0 13 26	0.0 3.6 7.5	0.0 5.7 4.6	2.3
Purgatorie River Bourbon	1/31	22	5.0	5.2	
RIO GRANDE BASIN-COLO					
<u>Alamosa River</u> Silver Lakes Summitville	1/26 1/28	16 54	2.8 16.9	3.2 12.3	3.9 11.6
<u>Conejos River</u> Cumbres LaManga Platoro River Springs	1/28 1/28 1/31 1/27	37 42 41 12	13.0 12.3 12.5 2.6	11.2 9.6 	13.2 12.9
<u>Culebra</u> <u>River</u> Brown Cabin Cottonwood (B) Culebra LaVeta Pass (B) Trinchera (B)	1/29 NS 1/28 1/28 1/28 1/28	16 26 26 29	3.7 8.3 7.5 7.6	0.0 4.7 4.6 5.4	 5.7 6.2
<u>Rio Grande</u> Cochetopa Pass Grayback Hiway Lake Humphrey Love Lake Pass Creek Pool Table Porcupine Santa Maria Upper Rio Grande Wolf Creek Pass Wolf Cr. Sum. (B)	1/28 1/31 1/28 1/27 1/31 1/27 1/28 1/27 1/28 1/27 1/28 1/31 1/31	22 56 33 38 36 29 42 23 36 62 71	4.2 19.2 7.5 10.4 10.5 6.2 11.6 5.4 10.2 20.9 25.9	3.4 15.1 1.8 3.3 6.9 1.0 5.0 0.9 3.7 16.1 17.3	3.4 15.7 5.6 8.9 6.1 8.2 3.4 5.4 17.8 17.7
RIO GRANDE BASIN-N.M.					
Pecos River Panchuela	1/27	13	2.7	0.1	2.6
<u>Rio Chama</u> Bateman Capulin Peak Chama Divide Chamita	1/26 1/28 1/27 1/27	27 15 9 20	6.8 4.1 2.7 5.4	6.0 2.8 1.8 3.7	7.0 3.3 3.3 5.0
<u>Rio Grande</u> Aspen Grove Big Tesuque Blue Bird Mesa	NS 1/28 1/27	20 10	5.1 2.8	1.0 0.7	
Cordova Elk Cabin Fenton Hill Pajarito Peak Payrole Quemazon Rio En Medio Sandoval Taos Canyon Tres Ritos	NS 2/1 1/28 1/26 1/29 1/29 1/28 1/28 1/28 1/26 1/31	12 19 35 4 20 26 25 16 8 10	3.7 5.5 10.3 1.3 4.8 7.0 7.8 5.9 2.0 3.2	0.2 1.0 4.3 3.1 3.8 0.8 0.0 0.6	 1.3 5.9 6.5 6.1 3.7
<u>Rio Hondo</u> Twinning	1/26	19	5.4	2.4	
Red River Hematite Park	1/25 1/25	14 20	2.7 5.5	0.0	3.4 4.4

NOTE

NS - No Survey (H) - On Adjacent Drainage

SNOW COURSE MEASUREMENTS as of February 1, 1972

	CUI	RRENTINFO	RMATION		ECORO	
SNOW COURSE	OATE	SNOW OEPTH (INCHES)	WATER CONTENT (INCHES)	WATER C		
	SURVEY	(INCHES)	(INCHES)	LAST YEAR	AVG 53 67	
SAN JUAN-DOLORES BASIN						
<u>Animas River</u> Cascade Lemon Mineral Creek Molas Lake Purgatory Red Mountain Pass Silverton Sub-Sta. Spud Mountain	1/28 1/31 1/28 1/28 1/28 1/28 1/28 1/28 1/28	31 25 36 34 54 64 26 55	9.9 7.8 11.5 10.9 18.4 23.1 6.9 20.0	5.9 5.2 10.0 8.3 11.0 20.7 3.1 13.1	8.0 8.9 8.4 17.0 4.8 15.0	
<u>Dolores River</u> Lizzard Head Lone Cone Rico Telluride Trout Lake	1/28 1/31 1/28 1/28 1/28 1/28	39 41 20 22 32	12.5 12.8 5.8 5.4 9.4	10.9 11.1 4.4 5.5 9.3	9.4 5.0 4.5 7.6	
San Juan River Chama Divide (B) Chamita (B) Upper San Juan Wolf Cr. Pass (B) Wolf Cr. Summit	1/27 1/27 1/31 1/31 1/31 1/31	9 20 67 62 71	2.7 5.4 23.3 20.9 25.9	1.8 3.7 17.8 16.1 17.3	17.8	
GUNNISON BASIN <u>Gunnison River</u> Alexander Lake Blue Mesa	1/27 NS	50 35	18.2 10.4	16.1 9.2	11.5	
Butte Cochetopa Pass (B) Crested Butte Keystone Lake City Mesa Lakes (B) McClure Pass Park Cone Park Reservoir Porphyry Creek Tomichi	1/31 1/28 1/31 1/27 1/26 1/28 1/29 1/27 1/31 1/31	35 22 36 50 25 40 43 34 56 37 35	10.4 4.2 9.1 14.9 7.6 11.5 14.3 7.0 16.1 10.5 10.1	9.2 3.4 9.6 13.9 2.9 12.0 9.9 5.9 17.9 9.5 8.3	12.6 10.3 11.6 6.2 14.1	
<u>Surface Creek</u> Alexander Lake Mesa Lakes (B) Park Reservoir	1/27 1/26 1/27	50 40 56	18.2 11.5 16.1	16.1 12.0 17.9	10.3	
Uncompahgre River Ironton Park Red Mountain Pass Telluride (B) COLORADO BASIN	1/28 1/28 1/28	26 64 22	6.7 23.1 5.4	9.2 20.7 5.5	7.6 17.0 4.5	
Blue River Blue River Fremont Pass Frisco Grizzly Peak Hoosier Pass (B) Shrine Pass Snake River Summit Ranch	1/28 1/28 1/31 1/31 1/28 1/31 1/31 1/29	26 42 22 38 44 24 26	5.4 10.4 4.8 10.5 9.3 11.4 4.6 5.6	4.7 10.8 5.2 14.2 7.1 13.8 6.6 5.6	9.5 4.3 9.8 7.6 9.6 4.7	

	CUF	RENT INFOR	RMATION	PAST R	ECORO
SNOW COURSE	OATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER C	ONTEN HESI AVG
				YEAR	53 67
<u>Colorado</u> <u>River</u> Arrow Berthoud Pass Berthoud Summit Cooper Hill Fiddler Gulch	1/28 1/26 1/28 1/28 NS	32 37 40 34	9.0 9.7 10.0 7.3	10.3 14.0 14.8 7.7	6.4 8.3 10.8 8.7
Glenmar Ranch Gore Pass Grand Lake Lake Irene Lapland	1/29 1/28 1/26 1/26 1/25	28 30 28 49 30	7.0 7.1 5.3 13.5 7.7	7.9 8.8 6.4 18.1 9.9	4.7 5.9 4.8 13.0
Lulu Lynx Pass McKenzie Gulch Midle Fork Milner North Inlet Pando Phantom Valley Ranch Creek Tennessee Pass(B) Vail Pass Vasquez	NS 1/28 1/28 1/29 1/26 1/27 1/28 1/26 1/28 1/31 1/31 1/27	34 27 28 35 25 31 25 28 43 45 35	8.0 6.2 6.4 8.4 5.5 8.1 5.6 6.5 5.7 11.9 8.7	11.0 3.5 8.3 11.8 7.2 5.8 9.1 8.1 5.8 13.9 11.6	6.6 3.4 5.4 8.7 5.3 5.7 6.1 5.1 5.1 6.2 10.0 6.9
Roaring Fork River Aspen Chapman Independence Pass Ivanhoe Kiln Last Chance Lift McClure Pass Nast North Lost Trail	1/28 1/28 1/21 1/29 1/29 1/29 1/28 1/28 1/29 1/28	44 42 46 40 36 42 43 25 43	12.3 11.8 10.0 13.0 9.6 9.0 11.0 14.3 5.3 13.6	12.3 10.4 9.4 13.9 7.0 7.6 12.0 9.9 4.9 11.2	8.9 9.5 9.6 10.3 11.6 3.7 9.5
<u>Williams</u> Fork River Glenmar Ranch Jones Pass Middle Fork	1/29 1/26 1/29	28 33 28	9.6 8.4 6.4	7.9 13.4 8.3	4.7 7.8 5.4
<u>Willow Creek</u> Granby Willow Creek Pass	1/28 1/28	27 33	6.1 9.4	6.0 10.8	4.6 7.1
<u>Plateau Creek</u> Mesa Lakes Park Reservoir Trickle Divide YAMPA BASIN	1/26 1/27 1/27	40 56 58	11.5 16.1 18.6	12.0 17.9 18.3	10.3 14.1 15.3
Elk River Clark Elk River Hahn's Peak	1/27 1/27 1/27	29 43 34	7.4 12.4 9.3	5.6 14.1 11.6	8.3 11.1
<u>White River</u> Burro Mountain Rio Blanco	1/28 1/27	40 38	11.9 10.0	13.9 12.2	10.7 8.9
Yampa River Bear River Columbine Lodge(B) Dry Lake Lynx Pass (B) Rabbit Ears Yampa View	NS 1/31 2/1 1/28 1/31 1/28	62 43 34 58 35	18.3 13.1 8.0 17.4 9.8	18.7 14.1 11.0 20.1 16.8	13.6 12.2 6.6 15.9 8.8

NOTE: NS - No Survey (B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass Willow Pass	11/3/71 11/10/71	11.1 9.5	6.8 8.3	6.2 8.1	6.4 6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	11/1/71	6.9	3.5	4.8	3.7
Big Thompson River					
Beaver Dam Guard Station Two Mile	11/2/71 11/2/71 11/2/71	7.1 6.9 9.1	5.3 3.2 5.5	5.1 4.1 5.2	3.8 3.4 5.5
<u>Clear</u> <u>Creek</u>					
Clear Creek Hoop Creek	12/20/71 11/10/71	9.5 4.9	5.3 2.6	8.1 3.4	7.1 2.9
Cache La Poudre River					
Feather Laramie Road	10/7/71 10/1/71	10.1 12.4	4.7 6.5	4.5 7.7	4.5 7.8
South Platte River					
Hoosier Pass Kenosha Pass	11/8/71 11/8/71	7.8 4.4	4.4 2.6	5.6 2.6	4.9 2.6
ARKANSAS BASIN					
Arkansas River					
Garfield Leadville Twin Lakes Tunnel	10/12/71 10/6/71 10/6/71	6.7 7.8 4.5	4.2 3.4 0.9	4.4 3.3 1.7	3.9 4.2 2.3
RIO GRANDE BASIN - COLORADO					
<u>Conejos</u> River					
Mogote	10/20/71	10.7	5.0	4.9	5.5
Rio Grande					
Bristol View LaVeta	10/21/71 10/20/71	6.1 11.9	3.1 7.1	5.0 9.4	3.9 7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman Chamita	10/28/71 11/15/71	6.7 8.0	4.5 4.1	1.9 1.2	2.5 2.4
Rio Grande					
Aqua Piedra Big Tesuque Rio En Medio Taos Canyon	12/28/71 10/13/71 10/13/71 12/28/71	7.2 3.7 3.5 3.3	6.0 0.8 0.8 2.3	3.7 2.1 2.1 2.2	3.1 1.5 1.4 2.3
Red River					
Red River Summit	12/28/71	4.8	1.8	1.6	2.2

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade Mineral Creek Molas Lake	11/2/71 11/1/71 11/1/71	9.1 5.7 9.4	5.5 3.1 5.5	5.5 3.5 6.6	6.3 3.7 4.6
Dolores River					
Dolores Lizzard Head Rico	10/28/71 10/28/71 10/28/71	19.6 11.8 13.8	10.6 3.9 8.5	8.0 4.6 10.9	6.7 8.3 9.9
GUNNISON BASIN					
Gunnison River					
King	10/12/71	3.3	2.1	2.3	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/8/71	4.2	2.7	3.4	2.8
<u>Colorado</u> <u>River</u>					
Berthoud Pass Gore Grand Mesa Ranch Creek Vail	11/10/71 11/8/71 11/8/71 11/10/71 10/25/71	3.9 4.9 12.5 8.7 12.3	2.5 3.3 9.9 4.7 4.9	3.1 3.0 11.1 5.7 7.0	2.8 2.5 9.3 6.0 6.9
Roaring Fork <u>River</u>					
Placita	11/12/71	9.3	5.8	7.0	5.2
YAMPA BASIN	ł				
Yampa <u>River</u>					
Hahn's Peak	11/3/71	19.0	11.3	12.7	11.8
1	, • 915P	1			

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer New Mexico State Engineer Nebraska State Engineer Colorado State University Experiment Station Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service Soil Conservation Service

Department of Interior

Bureau of Reclamation Geological Survey National Park Service Indian Service

Department of Commerce

National Weather Service

War Department

Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company Public Service Company of New Mexico

MUNICIPALITIES

City	of	Denver	City	o f	Greeley
City	of	Boulder	City	of	Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company San Luis Valley Irrigation District Santa Maria Reservoir Company Costilla Land Company Uncompangre Valley Water Users' Association Twin Lakes Reservoir and Canal Company Trinchera Irrigation Co.



POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE



UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. ROX 17107

P.O. BOX 17107 DENVER, COLORADO 80217 OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, 5300

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation , navigation , mining and industry "The Conservation of Water begins with the Snow Survey"